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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/911,109 | Applicant(s) NASHIDA ET AL. | |
| | Examiner James S. Wozniak | Art Unit 2626 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-26 and 29-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-26 and 29-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 3/22/2007, the applicant has submitted an amendment, filed 6/22/2007, amending independent claims 1, 25, and 49 to incorporate the subject matter previously included in claims 3-4 and 27-28, while arguing to traverse the art rejection based on the limitation regarding outputting speech for leading a user's intentions (*Amendment, Pages 22-23*). Applicant's arguments have been fully considered, however the previous rejection is maintained, altered only with respect to the amended claims and due to the reasons listed below in the response to arguments.

2. In response to amended claim 25, the examiner has withdrawn the previous 35 U.S.C. 101 rejection directed to claims 25-26 and 29-48.

3. Amended claim 49 fails to overcome the previous 35 U.S.C. 101 rejection because the body of the claim is still described in terms of the program rather than the method performed when the program stored on the computer-readable medium is executed (*i.e., the claim should read –A computer readable medium storing a program...externally connected apparatus, which when executed by the computer system performs a method comprising-- rather than “said program comprising the steps of” as is presently claimed*). It should be further pointed out that the added “computer-readable medium” is not limited to a *tangible* computer-readable medium

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in the specification ("*transmission medium*", *Page 16*), and for this reason also, amended claim 49 is directed to non-statutory subject matter. Since the term "storage medium" is used to describe only tangible computer readable mediums in the specification (*disk-based storage types*, *Page 16*), it is recommended that "computer-readable medium" be changed to --computer-readable storage medium-- in order to overcome this aspect of the 35 U.S.C. 101 rejection.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

With respect to **Claim 1**, the applicant argues that the subject matter previously recited in claim 4 or the limitation "output speech control means determines an assistant's speech for leading a user's intention when said command interpreting means fails to specify said user's intention or said inputted user command" is not taught by Houser et al (*U.S. Patent: 5,774,859*). More specifically, the applicant argues that Houser is deficient in this teaching because Houser describes prompting a user to repeat a misrecognized speech command, whereas the present invention does not prompt the user to repeat the same words, but outputs speech for leading the user's intentions (*Amendment, Pages 22-23*). Thus, the applicant argues that Houser fails to teach the leading speech recited in the presently claimed invention.

In response, the examiner notes that Houser does teach "leading a user's intention" in the form of re-prompts and option prompts. According to Houser, when a user speech input fails to be properly understood or clearly interpreted, the user can be asked to repeat an input speech

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command (*Col. 19, Lines 27-60*). In this case, the user is directed or led to more clearly state the intended speech input. Thus, the re-prompt in Houser can be considered to be “leading a user’s intention” since the user is directed by the system to take a next action of issuing another spoken input. Also, Houser explicitly discloses “leading a user’s intention” in the form of option-based prompts. In this case, when a user’s speech input is unclear, the user is asked or led to select from possible options (*Col. 19, Lines 27-60*). These option-based prompts do not require a user to resubmit an entire speech command since a user is led to only select one option over another (*Col. 19, Lines 45-46*). Thus, the option-based prompting taught by Houser also anticipates the claimed “leading a user’s intention”. Additionally, Trower et al (*U.S. Patent: 5,983,190*) discloses a speech synthesis means for providing interaction with a user in the form of speech (*Col. 23, Lines 36-60; and Col. 4, Lines 20-34*). Thus, the combination of the teachings of Trower and Houser discloses the aforementioned claim limitation.

The art rejections of independent claims 25 and 49 are traversed for reasons similar to claim 1 (*Amendment, Page 24*). In regards to such arguments, see the response to arguments directed towards claim 1.

The art rejections of the dependent claims are traversed for reasons similar to claim 1 (*Amendment, Page 24*). In regards to such arguments, see the response to arguments directed towards claim 1.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
6. The following title is suggested: --System And Method for Supporting Interactive User Interface Operations and Storage Medium--.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claim 49** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 49 is drawn to a “program” data structure *per se*, because the body of the claim is directed to the program data structure (*see preamble- “said program comprising the steps of”*) and not the method that is performed when the program is executed by a computer. For this reason, claim 49 is directed to non-statutory subject matter. See MPEP § 2106.IV.B.1.a.

Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed *data structures* do not define any structural and functional interrelationships between the data structure and other claimed aspects of the

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invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which *permit the data structure's functionality to be realized*, and is thus statutory.

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

It should be further pointed out that the added “computer-readable medium” is not limited to a *tangible* computer-readable medium in the specification (“*transmission medium*”, *Page 16*), and for this reason also, amended claim 49 is directed to non-statutory subject matter. Since the term “storage medium” is used to describe only tangible computer readable mediums in the specification (*disk-based storage types, Page 16*), it is recommended that “computer-readable medium” be changed to –computer-readable storage medium-- in order to overcome this aspect of the 35 U.S.C. 101 rejection.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-6, 9, 11-12, 17, 19, 22-30, 33, 35-36, 41, 43, 46-49, and 52-55** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al (*U.S. Patent: 5,983,190*) in view of Kawamoto et al (*U.S. Patent: 5,367,454*), and in further view of Houser et al (*U.S. Patent: 5,774,859*).

With respect to **Claims 1, 25, and 49**, Trower discloses:

An assistant control means for generating a personified assistant and making said assistant appear on a screen of said display unit (*Fig. 2, Element 60*);

An output speech control means for determining speech required for said assistant to output said assistant's speech to the outside through said speech output unit after speech synthesis (*determining an appropriate response to a speech input and performing speech synthesis, Col. 23, Lines 36-60; and speakers, Col. 4, Lines 20-34*);

An input speech recognition means for recognizing user's voice as a speech inputted through said speech input unit (*recognition engine for recognizing a speech input, Col. 6, Line 62- Col. 7, Line 12, and Fig. 3, Element 118*);

An interaction management means for managing interaction between said assistant and said user according to said assistant's speech determined by said output speech control means and said user speech recognized by said input speech recognition means (*maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*); and

A command interpreting means for specifying a user's intention or specifying said inputted user command based on a content of interaction traced by said interaction management

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means (*spoken command recognition and maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*).

Wherein the output speech control means determines an assistant's speech based on a content of interaction managed by said interaction management means and/or an inputted user command specified by said command interpreting means (*selection of an appropriate speech output in response to a user command, Col. 23, Lines 36-60, and a maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*).

Trower also discloses a computer readable medium for storage of a program implementing the above method (*Col. 4, Lines 8-19*).

Trower fails to explicitly teach or fairly suggest generating an ambient state enabling a animated personified assistant to act as if urging the user to input speech commands when an interactive system is in a waiting state, however Kawamoto teaches such an ambient state generating means (*waiting action taken by an animated agent when no user utterance is detected comprising an anger animation and repeating an utterance request, Col. 5, Line 60- Col. 6, Line 18, wherein an utterance is accepted and processed via a speech recognizer, Col. 4, Lines 21-34*).

Trower and Kawamoto are analogous art because they are from a similar field of endeavor in interactive speech recognition systems having animated characters. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower with the means of generating appropriate actions when a interactive speech system is in a waiting state as taught by Kawamoto in order to greatly enhance the exchange of intentions between a user and an animated agent (*Kawamoto, Col. 9, Lines 8-19*).

Trower in view of Kawamoto does not specifically suggest specific commands related to changing/selecting a channel or generating a leading prompt when a user's intention or input command is not properly interpreted, however Houser recites the concept of utilizing spoken language commands for changing/selecting channels (*Col. 14, Line 61- Col. 15, Line 27*).

Houser also discloses:

Control means determines speech for leading a user's intention when said command interpreting means fails to specify said user's intention or said inputted user command (*prompting a user to select an intended channel upon the occurrence of a command recognition error, Col. 19, Lines 27-60*).

Trower, Kawamoto, and Houser are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of clarifying and recognizing commands related to TV channel selection as taught by Houser with the speech command interface system and method utilizing an interactive animated character as taught by Trower in view of Kawamoto to increase speech command system functionality and usability by further adding the ability to perform and simplify common television related tasks (*Houser, Col. 1, Line 59- Col. 2, Line 16*).

With respect to **Claims 2 and 26**, Trower recites:

Assistant control means determines an animation of said assistant based on a content of interaction managed by said interaction management means and/or an inputted user command specified by said command interpreting means (*playing an animation for a current command*

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based upon a state resulting from a previous command, Col. 24, Lines 25-34, and a maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29).

With respect to **Claims 5 and 29**, Houser further discloses:

Command interpreting means also interprets a command for controlling a function of said external apparatus including selection of a broadcast program channel and/or recording/reproducing of said broadcast program (*Col. 30, Lines 26-42*).

With respect to **Claims 6 and 30**, Trower shows:

Communication means for connecting said system to a communication medium such as an external network or a telephone line (*Fig. 11, Element 454*), wherein said input speech recognition means recognizes audio data received via said communication medium (*server, linked to multiple clients, featuring a speech recognition engine, Fig. 3, Element 118, and Col. 6, Line 62- Col. 7, Line 12*).

With respect to **Claims 9 and 33**, Trower shows:

Personified assistant is placed in a room scattered with various kinds of objects including a link to an information resource (*Fig. 2, and Internet browser in a desktop space containing an animated character, Col. 4, Lines 54-67*).

With respect to **Claims 11 and 35**, Trower recites:

Upon the command interpreting means interpreting an inputted user command, said assistant control means makes said assistant appear on a screen of said display unit (*request for opening a character file, Col. 13, Lines 21-43*).

With respect to **Claims 12 and 36**, Houser further discloses:

In response to said command interpreting means interpreting an inputted user command as a channel selection command, control means shows a selected broadcasting program in a display window (*channel information and selection commands, Col. 25, Line 38- Col. 26, Line 6*).

With respect to **Claims 17 and 41**, Houser additionally recites:

In response to said command interpreting means interpreting an inputted user command as a channel change command, said assistant control means makes said assistant appear with a list of changeable broadcasting programs arranged in a matrix shape (*viewing guide menu command used for channel selection, Col. 25, Line 33- Col. 26, Line 6, and Fig. 11*).

With respect to **Claims 19 and 43**, Houser further discloses:

EPG distributed as part of data broadcast is applied for generating a list of broadcasting programs in a matrix form (*Col. 25, Lines 33-64*).

With respect to **Claims 22 and 46**, Houser further discloses:

Communication means for connecting said system to a communication medium such as an external network or a telephone line, and a certifying means for certifying an information terminal connected to said system via said communication medium (*Fig. 2A, and EPG access authorization, Col. 25, Lines 33-37*).

With respect to **Claims 23, 24, 47, and 48**, Houser discloses the viewing guide that displays program information as applied to Claims 17 and 41 and shown in Fig. 11.

With respect to **Claim 52**, Kawamoto additionally discloses:

The motions or act include a leading question (*asking a user to provide an input utterance, Col. 6, Lines 6-18*).

With respect to **Claim 53**, Kawamoto additionally discloses:

The ambient state generating means enables said personified assistant to enter said wait state with words and/or utterances encouraging a response from said user (*spoken utterance request in response to user silence, Col. 6, Lines 14-18*).

With respect to **Claim 54**, Kawamoto discloses the spoken utterance request in response to user silence as applied to Claim 53. Although Kawamoto does not explicitly state what words an utterance comprises, the examiner notes that it would be obvious within the scope of the teachings of Kawamoto that a re-prompt utterance would include “ah” and “well” because these are well known filler terms in the English language, which express regret. Since, a lack of a user response is an occasion for such feelings and Kawamoto is concerned with expressing the emotion of an animated character, it would be obvious to include such well-known and standard words in the utterance request taught by Kawamoto.

With respect to **Claim 55**, Kawamoto additionally discloses:

Gestures encouraging a response from the user (*spoken utterance request in response to user silence, Col. 6, Lines 14-18, wherein an utterance is accompanied by an animation, Col. 4, 53- Col. 5, Line 2*).

11. **Claims 7, 8, 31, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto et al in view of Houser et al, and further in view of Lumelsky et al (*U.S. Patent: 6,081,780*).

With respect to **Claims 7 and 31**, Trower in view of Kawamoto and further in view of Houser teaches the speech command interface system and method utilizing an interactive

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animated character, as applied to Claims 1 and 25. Trower also teaches the ability to access email utilizing a speech command (*Col. 28, Lines 20-29, and network connection, Fig. 11, Element 454*), but does not specifically suggest that the animated character recites the content of a received email using a speech output means. However, Lumelsky discloses:

Communication means for connecting said system to a communication medium such as an external network and/or a telephone line, and a mail exchange means for making an exchange of electronic mails via said communication medium, wherein said output speech control means determines said assistant's speech based on a content of an incoming mail (*user request for speech synthesis of e-mails, Col. 20, Line 65- Col. 21, Line 16*).

Trower, Kawamoto, Houser, and Lumelsky are analogous art because they are from a similar field of endeavor in speech-controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the ability to synthesize a received email as taught by Lumelsky with the speech command interface system and method utilizing an interactive animated character taught by Trower in view of Kawamoto and further in view of Houser to provide an alternate means of conveniently accessing email contents when a user does not have a continual view of a display. Therefore, it would have been obvious to combine Lumelsky with Trower in view of Kawamoto and further in view of Houser for the benefit of providing an alternate means of conveniently accessing email contents.

With respect to **Claims 8 and 32**, Lumelsky further discloses:

Interaction management means manages an input speech of a user as a message bound for another user, and said output speech control means determines said assistant's speech based on

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said message (*playback of a voice mail attached to an email in response to a speech command, Col. 20, Line 58- Col. 21, Line 16*).

12. **Claims 10 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto in view of Houser et al, and further in view of Crow et al (*U.S. Patent: 6,262,724*).

With respect to **Claims 10 and 34**, Trower in view of Kawamoto and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character located in a desktop space, as applied to Claims 9 and 33. Trower in view of Kawamoto and further in view of Houser does not teach the display of a link containing musical content in the display space, however Crow discloses:

Assistant control means places said personified assistant in a room scattered with various kinds of objects including a link to an information resource, and in response to an interest of said user in a recording medium including a link to a music content placed in said room, said command interpreting means interprets an inputted user command as a command for playing back said music content (*media files capable of being located on a desktop, Col. 9, Lines 52-56, and speech control of a media player, Col. 8, Line 55- Col. 9, Line 25*).

Trower, Kawamoto, Houser, and Crow are analogous art because they are from a similar field of endeavor in speech-controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the speech enabled media player taught by Crow with the speech command interface system and method utilizing an interactive animated character located in a desktop space taught by Trower in view of Kawamoto and

further in view of Houser in order to increase speech command system functionality and usability by further adding the ability to control audio file playback using speech recognition (*Crow, Col. 2, Lines 58-60*). Therefore, it would have been obvious to combine Crow with Trower in view of Kawamoto and further in view of Houser for the benefit of increasing speech command system and method usability.

13. **Claims 13 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto, further view of Houser et al, and yet further in view of Volk et al (U.S. Patent: 5,687,331).

With respect to **Claims 13 and 37**, Trower in view of Kawamoto and further in view of Houser teach the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus, as applied to Claims 12 and 36. Trower in view of Kawamoto, and further in view of Houser do not suggest the use of a ring-based window placed around an animation for channel selection, however, Volk teaches such a ring-shaped window for TV program selection (*Col. 12, Lines 29-40*).

Trower, Kawamoto, Houser, and Volk are analogous art because they are from a similar field of endeavor in interactive control systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower in view of Kawamoto and further in view of Houser with the ring-shaped window for TV program selection as taught by Volk in order to provide a more communicative means of indicating focus in an interactive television environment (*Volk, Col. 6, Lines 26-37*).

14. **Claims 14 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto, further view of Houser et al, further in view of Volk et al, and yet further in view of Florin et al (*U.S. Patent: 5,583,560*).

With respect to **Claims 14 and 38**, Trower in view of Kawamoto, further in view of Houser, and further in view of Volk teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 13 and 37. Trower in view of Kawamoto, further in view of Houser, and further in view of Volk does not teach the ability to zoom in on a selected channel, however Florin discloses a picture-in-picture window with the ability to jump to (zoom in on) the channel displayed in the window (*Col. 17, Lines 41-59, voice command means, Col. 12, Lines 59-67, and Figs. 20 and 21*).

Trower, Kawamoto, Houser, Volk, and Florin are analogous art because they are from a similar field of endeavor in interactive controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of zooming in on a channel feature in a picture-in-picture window as taught by Florin with the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information as taught by Trower in view of Kawamoto, further in view of Houser, and further in view of Volk to provide a convenient speech-enabled means of previewing and accessing a selected television channel, thus increasing system functionality. Therefore it would have been obvious to combine Florin with Trower in view of Kawamoto, in view of Houser, and further in view of Volk in order to provide a means to quickly jump between television programs (*Florin, Col. 17, Lines 41-59*).

15. **Claims 15 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto, further view of Houser et al, and yet further in view of Kanerva et al (*U.S. Patent: 6,026,416*).

With respect to **Claims 15 and 39**, Trower in view of Kawamoto, and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 12 and 36. Trower in view of Kawamoto, and further in view of Houser does not suggest that the menus containing program information are shown in a binder on a display, however, Kanerva teaches such a binder display format (*Col. 6, Lines 8-38*).

Trower, Kawamoto, Houser, and Kanerva are analogous art because they are from a similar field of endeavor in interactive control systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower in view of Kawamoto and further in view of Houser with the binder display format taught by Kanerva in order to provide a means for maintaining related data in an ordered format (*Kanerva, Col. 3, Lines 20-27*).

16. **Claims 16 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto, further view of Houser et al, further in view of Kanerva et al, and yet further in view of Florin et al (*U.S. Patent: 5,583,560*).

With respect to **Claims 16 and 40**, Trower in view of Kawamoto, further in view of Houser, and further in view of Kanerva teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 15 and 39. Trower in view of Kawamoto, further in view of Houser, and further in view of Kanerva does not teach the ability to zoom in on a selected channel, however Florin discloses a picture-in-picture window with the ability to jump to (zoom in on) the channel displayed in the window (*Col. 17, Lines 41-59, voice command means, Col. 12, Lines 59-67, and Figs. 20 and 21*).

Trower, Kawamoto, Houser, Kanerva, and Florin are analogous art because they are from a similar field of endeavor in interactive controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of zooming in on a channel feature in a picture-in-picture window as taught by Florin with the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information as taught by Trower in view of Kawamoto, further in view of Houser, and further in view of Kanerva to provide a convenient speech-enabled means of previewing and accessing a selected television channel, thus increasing system functionality. Therefore it would have been obvious to combine Florin with Trower in view of Kawamoto, in view of Houser, and further in view of Kanerva in order to provide a means to quickly jump between television programs (*Florin, Col. 17, Lines 41-59*).

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17. **Claims 18 and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto, in further view of Houser et al, and yet further in view of Florin et al (*U.S. Patent: 5,583,560*).

With respect to **Claims 18 and 42**, Trower in view of Kawamoto, and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 13, 15, 17, 37, 39, and 41. Trower in view of Kawamoto, and further in view of Houser does not teach the ability to zoom in on a selected channel, however Florin discloses a picture-in-picture window with the ability to jump to (zoom in on) the channel displayed in the window (*Col. 17, Lines 41-59, voice command means, Col. 12, Lines 59-67, and Figs. 20 and 21*).

Trower, Kawamoto, Houser, and Florin are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of zooming in on a channel feature in a picture-in-picture window as taught by Florin with the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information as taught by Trower in view of Kawamoto, and further in view of Houser to provide a convenient speech-enabled means of previewing and accessing a selected television channel, thus increasing system functionality. Therefore it would have been obvious to combine Florin with Trower in view of Kawamoto, and further in view of Houser in order to provide a means to quickly jump between television programs (*Florin, Col. 17, Lines 41-59*).

18. **Claims 20 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto in view of Houser et al, further in view of Lumelsky et al, and yet further in view of Ludwig et al (*U.S. Patent: 5,758,079*).

With respect to **Claims 20 and 44**, Trower in view of Kawamoto in view of Houser, and further in view of Lumelsky teaches the speech command interface system and method utilizing an interactive animated character capable of accessing and synthesizing e-mail messages, as applied to Claims 7 and 31. Trower in view of Kawamoto in view of Houser, and further in view of Lumelsky does not specifically suggest displaying a new or incoming mail icon in response to the acceptance of mail; however, Ludwig teaches an image that indicates the presence of a new e-mail message (*dog having an envelope in its mouth, Col. 36, Lines 11-24*).

Trower, Kawamoto, Houser, Lumelsky, and Ludwig are analogous art because they are from a similar field of endeavor in interactive control systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower in view of Kawamoto in view of Houser and further in view of Lumelsky with the image that indicates the presence of a new e-mail message as taught by Ludwig in order to enable quick notification and access of an incoming e-mail message (*Ludwig, Col. 38, Lines 12-22*).

19. **Claims 21, 45, and 50-51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Kawamoto in view of Houser, and further in view of Iwamura et al (*U.S. Patent: 5,262,760*).

With respect to **Claims 21 and 45**, Trower in view of Kawamoto and further in view of Houser teaches the speech command interface system and method utilizing an interactive

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animated character, as applied to Claims 1 and 25. Trower in view of Kawamoto and further in view of Houser does not specifically suggest Kanji to Kana text conversion, however Iwamura teaches such a kanji-kana conversion (*Col. 6, Line 61- Col. 7, Line 2*).

Trower, Kawamoto, Houser, and Iwamura are analogous art because they are from a similar field of endeavor in interactive control systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower in view of Kawamoto with the kanji-kana conversion means taught by Iwamura in order to provide a user with the option of easily editing display graphics (*Iwamura, Col. 6, Line 57- Col. 7, Line 2; and Col. 3, Lines 24-41*).

Claims 50 and 51 contain subject matter similar to Claims 21 and 45, and thus, are rejected for the same reasons.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Linnett et al (*U.S. Patent: 5,682,469*)- discloses a user interface having animated characters.

Rist et al (*"Adding Animated Presentation Agents to the Interface," 1997*)- discloses animated agents utilized in an interactive interface.

Beskow et al (*"OLGA - A Dialogue System with an Animated Talking Agent," 1997*)- discloses a system that is capable of requesting further speech information from a user to advance a television control dialog.

Cavazza et al (*"The Virtual Interactive Presenter: A Conversational Character for Interactive Television," 2000*)- discloses an interactive animated character for use in an interactive television application that employs a leading dialog with a user to determine an intended program.

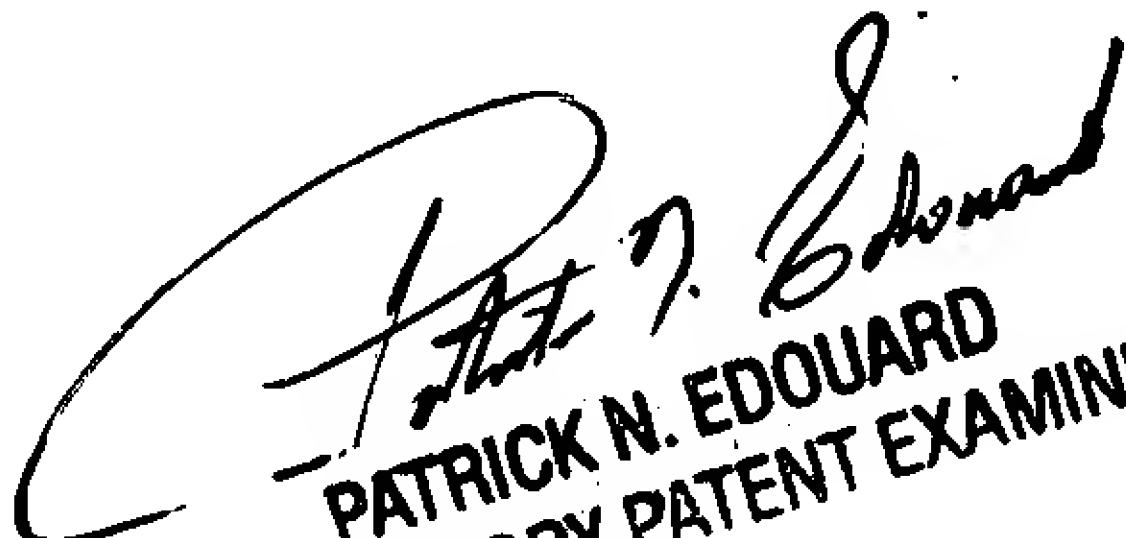
22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632.

The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
8/3/2007


PATRICK N. EDOUARD
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